

U.S.G.S.

Inventory of

65

1052

to

1062

1888

TRANSIT BOOK

~~William~~  
Gilbert  
Van  
Inger

AUTHOR Van Duzee, Gilbert INDEX NO. 6 DATE 1889  
 LOCALITY Walter Co., New York and Somerset Co., Maine  
 (Index map coordinates) (District or quadrangle name) (State)

Character of record Ful, note books of Gilbert Vanduzee on collecting  
trips - sent under direction of Dr. Williams  
Walter & Greene Co., N.Y. (Oriskany), Loc-no 1053 to  
1058 inclusive

Somerset County Maine, (Oriskany) Loc no 1059-1062.  
 The first series (Walter & Greene Co., N.Y.) are in the lot sent to National  
 Museum, June 1914. The Maine (Somerset Co.) collections are still  
 in Ithaca, in charge of B.W. June 1914.)

Gilbert Van Duzee  
Ful Notes 1889  
Walter & Greene Co., N.Y.  
 Loc. 1053, 1054, 1055, 1056, 1057  
 + 1058

Somerset Co. Maine  
1059, 1060, 1061, 1062

Oriskany formation

Station numbers

Δ 1053-1062

1889

3

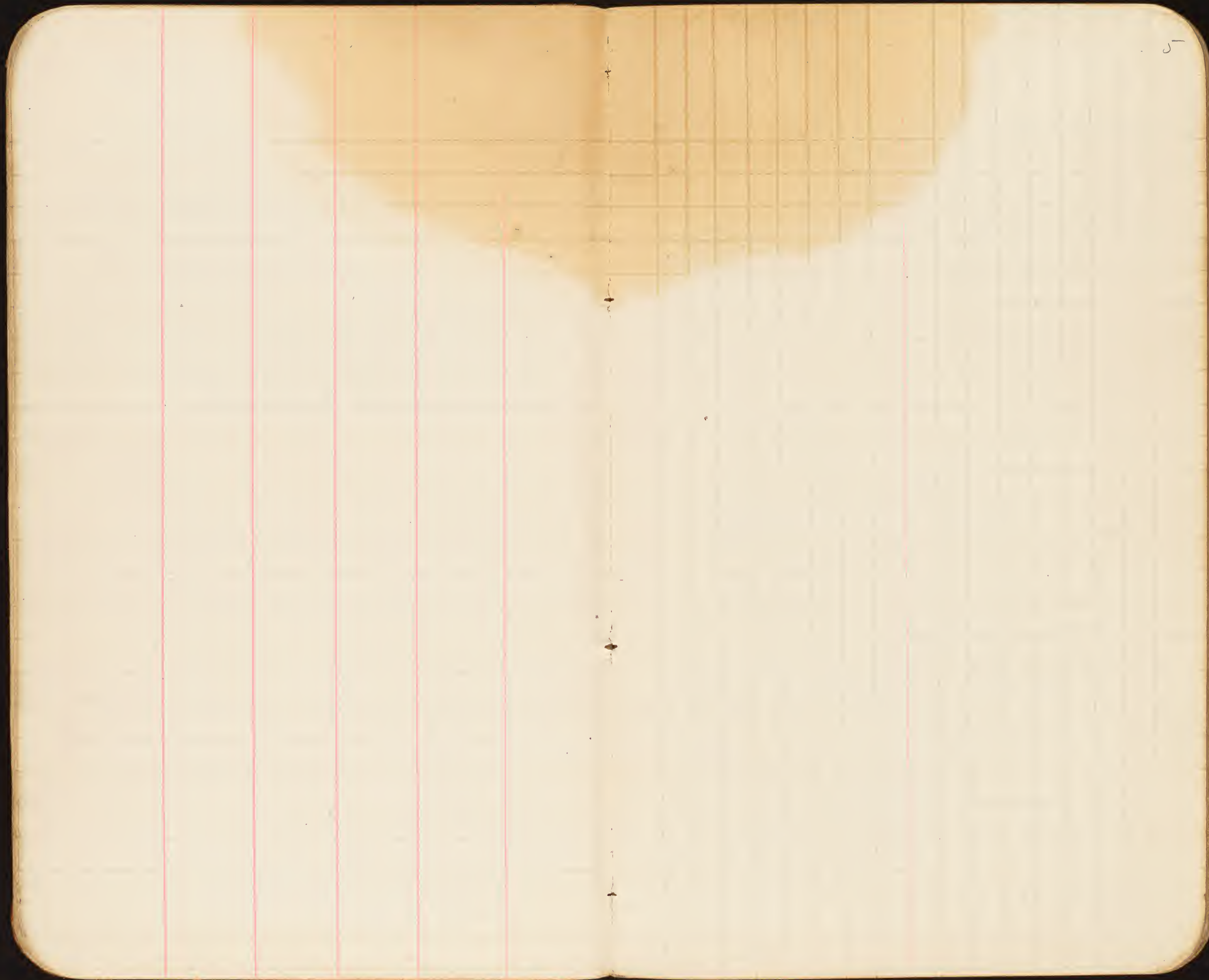
Apr 23-89

Station 1053

Is limer in Ulster Co. N.Y. on  
post road from Saugerties to Kingston

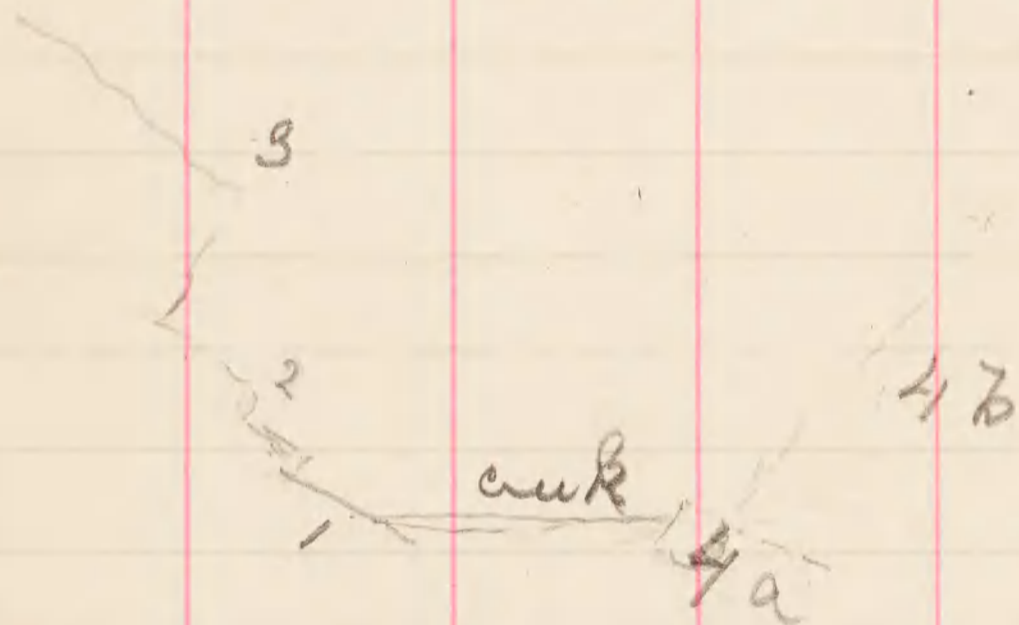
Section A

Valley of Esopus Creek from  
Covered Bridge north of Ulster Lead  
Works up the creek



Apr. 24-89.

1053 Section A -  
on bank of Cooper's Creek, 1<sup>mi</sup> N. of  
Wm Lead works



1 - is on the East bank below the  
covered bridge.  
dip  $21^{\circ}30'$  W  $35^{\circ}$  N Strike N  $35^{\circ}$  E  
very hard sandstone containing fossils  
Principal spec.  
*Spinifera arrecta*  
*Schizanthus pleuropterus*  
*Merista lata?*

thickness unknown

2 = on the East bank is about 18  
ft above 1

contains many fossils.  
more calcareous than 1 and harder

4 On the West bank,  
outcrops at water's edge. Surface  
covered with *Trinocardia Canadensis*  
& specimens of a *Discina* and  
one *Atrypa hystrix*.  
A dark gray grit weathering to  
dark brown.

3  
1/2 mile N. of Leadworks on East  
side of road to the Oniskany Sandstone  
is exposed for a distance of 1/2 mile.  
The surface and softer layers are  
entirely decomposed leaving the fossil  
of which there are great quantities  
free.

It comes between Nos 2 on the  
East bank and 4 on the West bank.  
The rock is a hard grey sandstone when  
not decomposed.

Apr 26

Collected from "1053-A-3"

Apr. 27. 89.

Sent box from Kingston  
containing fossils from "1053-A-3" and the  
i.e. from Oniskany S.S. and Onida G. S.?  
or Scholone G. S. at Glenora, Ulster Co.  
N.Y. Also a smaller box containing  
from "1053-A-3"

#1053

13

Apr 29-89 Esplanade N.Y.

Collected some *Piscinas* and pyritous *Orthoceras*? from the dark grey S.S. at the covered bridge

1053-A-4 as exposed at covered

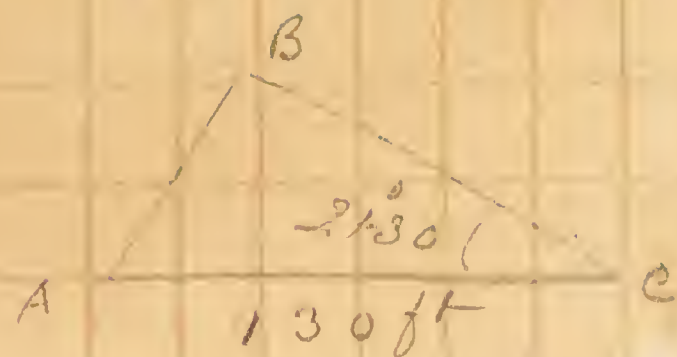
4a bridge consists of a heavy band of S.S. at the water's edge (sup 6) the thickness of which I have not yet been able to determine.

4b Above this lie about 60 ft (locks) of dark grey fine grained sandstone

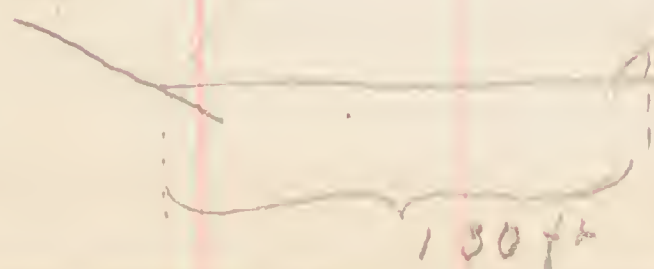
4c somewhat friable when near surface more compact underneath.

Dip same as A-1 on East side of stream.

This rock contains a number of pyritous nodules.



From these data can be found the thickness of the strata between A 1 and A 4



15

East bank of Creek  $\frac{1}{2}$  m. below Reed  
mill.

At x there is a shaly layer  
very thin, fissile,  
contains a few  
fossils.

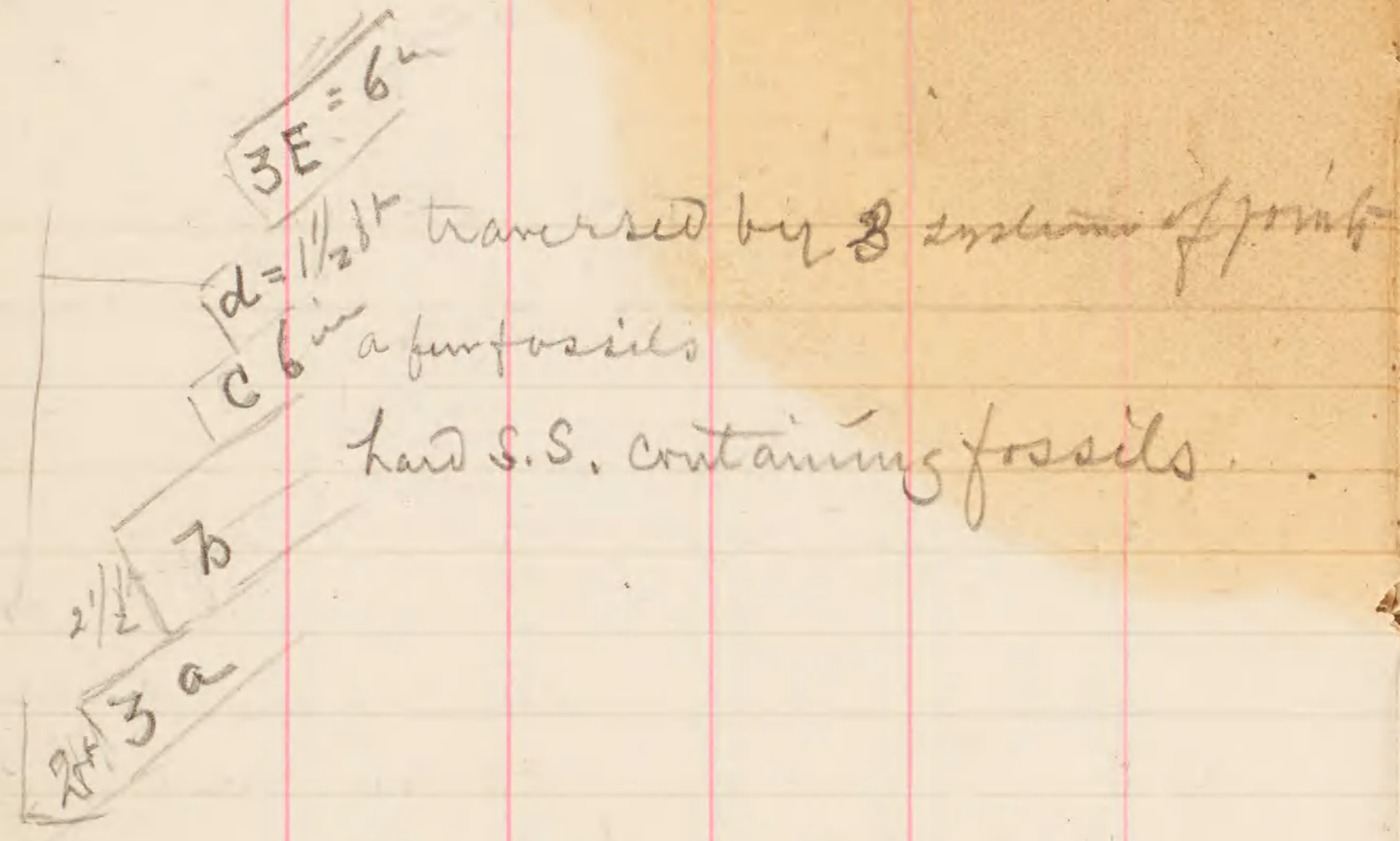
In 3 E are a number of heads of a  
*Strophodont magniventris*  
*Dipterocaria flabellites*, a *Lamellitroch*  
 some small *Spirifers* like *S. pinnatus*  
 and numerous other forms.



3a - contains *Staphylinus* *rectus*  
" *Phygadeuon* "

It is separated from S by a thin  
shaly layer. Heavily bedded

Below 3a lies a thin sandy layer  
containing a few fossils.



joint in 3d run N - N 55 E -  
N 20 E

3C is the layer from which the most trilobites have been collected. It is very hard.

3E is a sandstone layer contains most of the fossils found in S.S. at East side of road.

Between it and (3d) is a thin layer of shale with a few fossils.

x of page 14

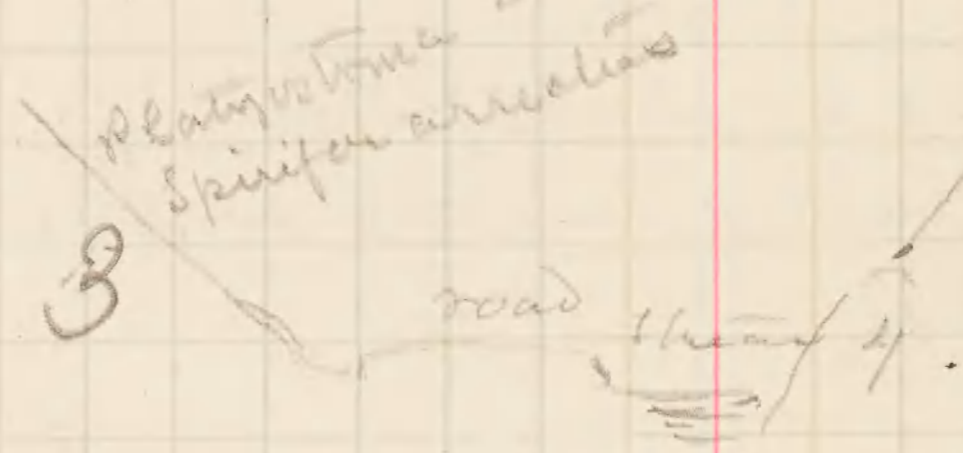
3b is 2 1/2 ft thick

In 3d are a great many spinifers

dip of 3a is 18° 30' W 20° N

at the line where the strata of 3 are exposed on both sides of the road.

450 ft South of School House



not the faciated surface  
dip of 3A is 30° 30' W 20° N

There is evidently a fault. A valley runs along the line which runs S 20° W. The rocks of 3 are glaciated while those of 4 are not.

At the Lead Mills the Esopus  
Creek enters the valley from the  
West

The trend of the valley is  $S 20^{\circ} W$

May 1-1889.

1 Collected from A 3 E/

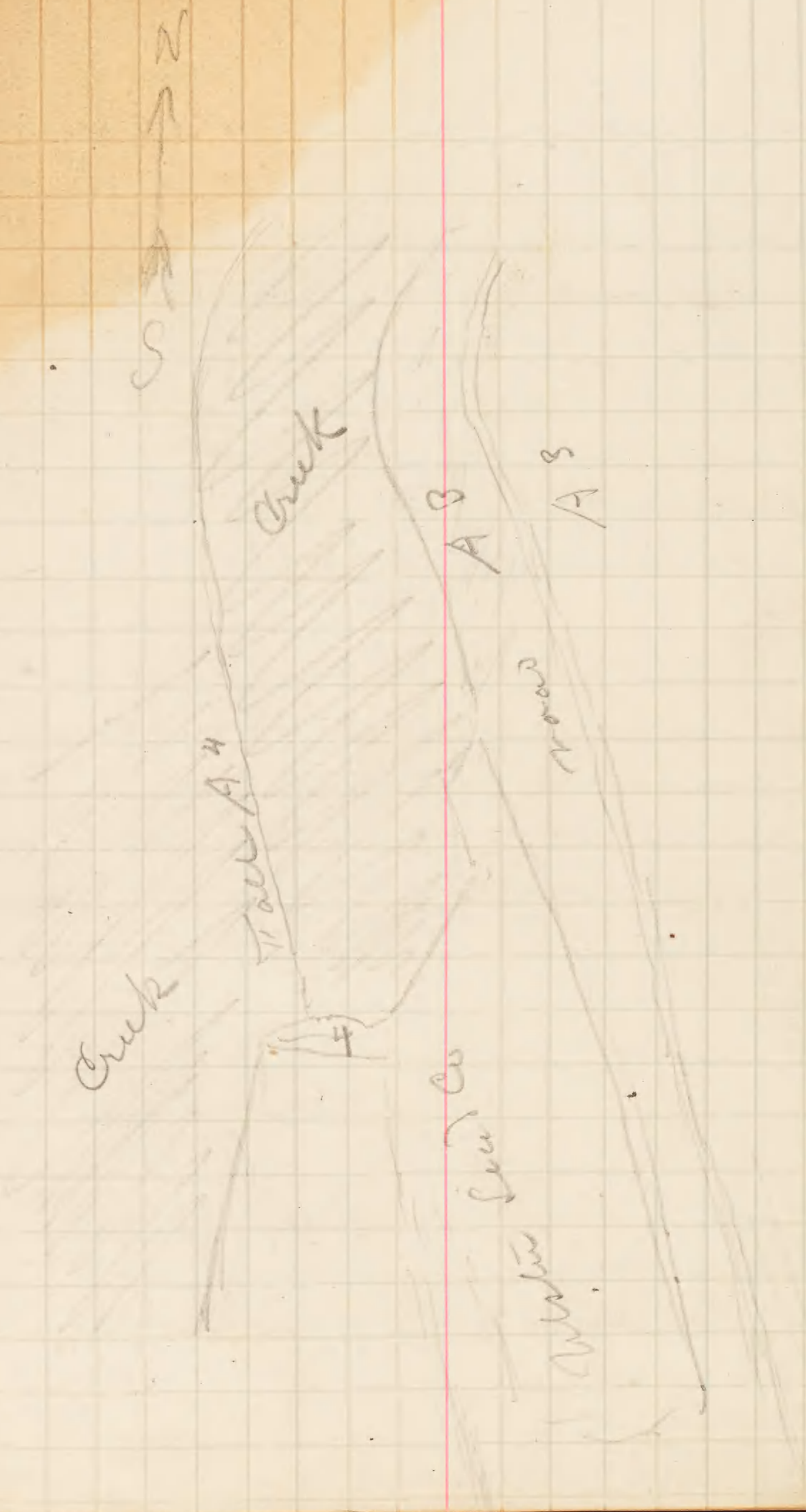
4a Back of the mill the bottom  
stratum of 4 appears forming  
the brink of the Fall.

Dip  $11^{\circ} 15'$   $W 30^{\circ} N$

Surface covered with *Tucoides*  
*Canta Galli*

About 5 ft above it and appearing  
4b back of the mill along sluice is  
a stratum of <sup>very</sup> fissile arenaceous  
shale with *Lingulas* and nodules  
of pyrites. It is about 10 ft thick  
and rests upon the *Canta*  
*Galli* layer.

It breaks up into small fragments on  
weathering



(Locke level)

Upon this lie some 320 ft  
4C of harder more sandy shale  
still fissile but breaking up  
into larger fragments than

4B

4C contains pyrite nodules  
Found fossils on the north bank  
about 500 yards below the  
West-Shore R. R. bridge.

4d Is a hard sandstone.

Lighter in color than (C) and  
more compact. The lower portion  
(about 25 ft) is broken up by  
joints at rt  $\alpha$  to the plane of dep-  
osition while the upper portion  
35 ft is quite free from them.

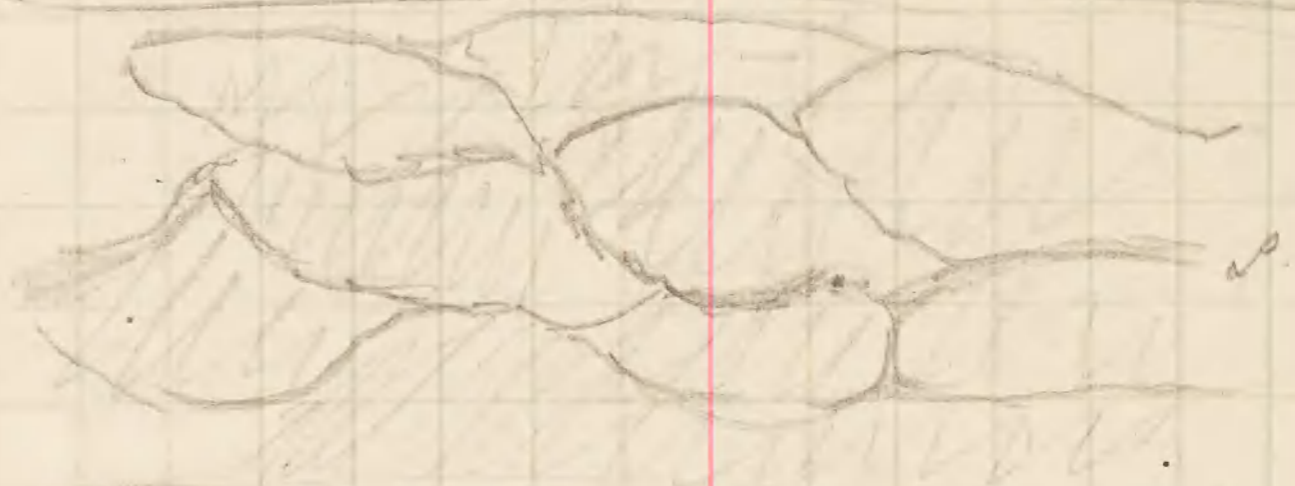
It is also well exposed along the  
East side of the R. R. track.  
Here most of the fossils were  
collected.

S. 1053-A.

5

About 1000 ft North  
of the R. R. bridge is an  
exposure of a light grey  
limestone. Very hard.  
Contains many fossils.  
While 4d dips about  $20^\circ$  N-W  
5 is almost vertical & strikes  
NE.

numerous fine bands of



transverse section of 5

Sandstone runs through it  
horizontally (parallel with plane of  
deposition).

It contains many fossils  
Crinoid stem corals

It also contains <sup>higher up</sup> many flinty &

## Calcareous layers

It runs along for about 150 ft and then disappears beneath the drift.

200 ft further north it appears again with a dip of  $70^{\circ}$  and strike N 30 E which changes to 440 within the next 100 ft and goes under the drift 150 ft further north.

It can be seen on the road from the R.R. Sta. <sup>at Marion</sup> to Glenview in the first ridge.

23  
May-2-89

Spent day in packing up the fossils collected from  
1053

A-3+4+5. Shipped the box from Mt Marion.

Returned to Kingswin in evening.

May, 3, 89 Took stage in A.M.

to Marbletown. Coniferous strata exposed along the road.

Coniferous especially well exposed at Marbletown. Collected some fossils from the stratum corresponding to  
A 1053 A 4d.

#1054

May 4. 89

Sta. 1054-A - Township of  
Marbletown Ulster Co N.Y.  
Section A <sup>figures</sup> on Esopus Creek at  
farm of George Van Wageningen,  
1 mile N.W. of Marbletown P.O.

1 - On left bank of creek at covered  
bridge, a blue stone containing  
fossils mostly corals in its  
lower part. Exposed along bed  
of creek for about 1000 ft.  
dip. =  $5^{\circ}$  N  $10^{\circ}$  W.

weathers to dark grey

It gradually runs into a  
hard sandstone & fossils run into

2. overlying 1.

Hard grey S.S. weathering to brown  
a few fossils. only 6 in thick

3 is a S.S. almost barren of  
fossils.

traversed by joints N  $10^{\circ}$  E. and  
W  $10^{\circ}$  N.

180 ft exposure <sup>horizontally</sup> dip  $5^{\circ}$  N  $10^{\circ}$  W.

25

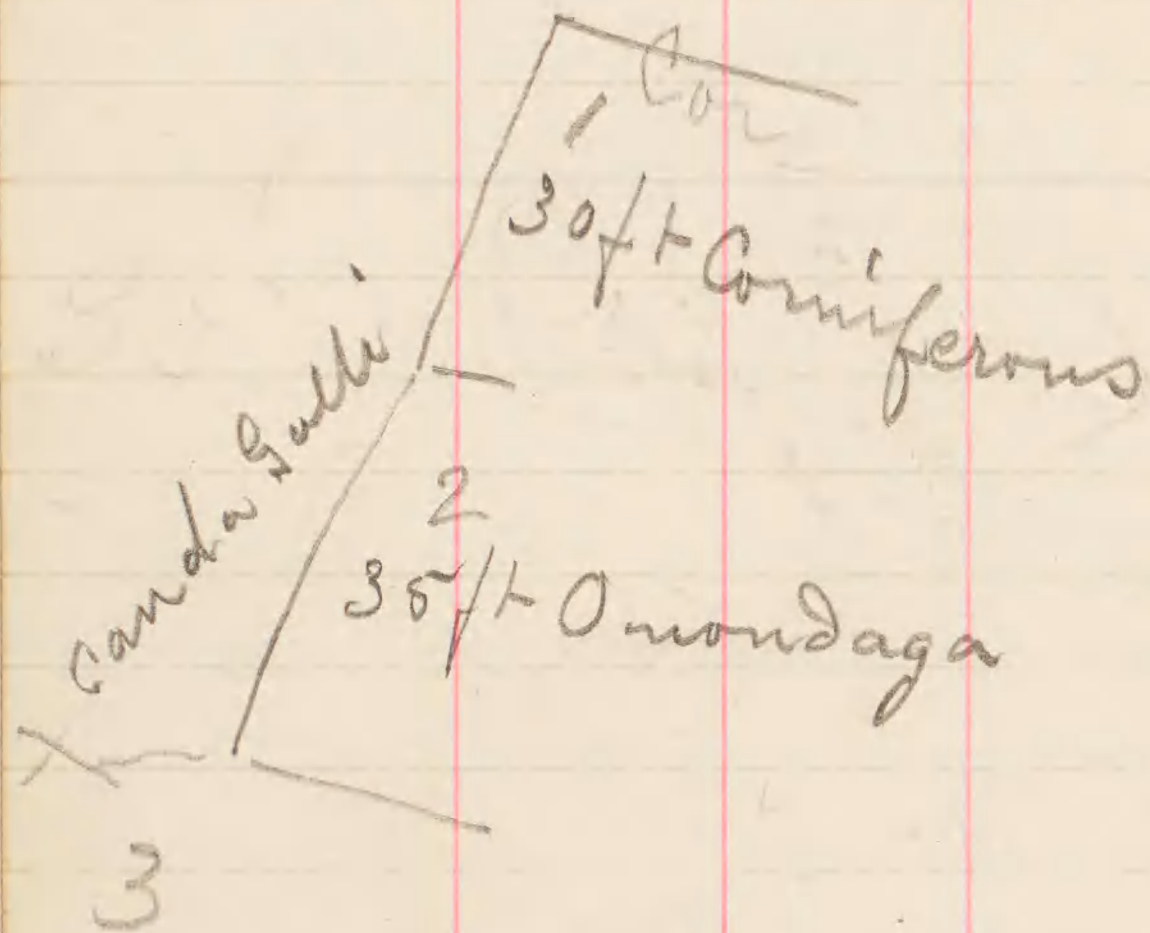
These S.S. soon runs under  
and for a mile & a half no  
rocks are seen.

Then about 60 ft of soft shale  
4 Shales are seen. The lower parts  
have their surfaces covered with  
iron. They resemble the  
Struc. Lingula bed.

They are grey where not weathered.  
They contain a great abundance  
of a minute Lingula and a  
small Livorhynchus. Near the  
middle there are Goniatites  
and small Orthoceras, ferns?  
and Samulibras. They are exposed  
along the creek for about 1000 ft.  
Then they run under the drift.

A farmer tells me that a layer  
below any of these in this section  
was formerly quarried for flag  
stone. I saw where it outcrops  
on the hill side and it must  
be at least 100 ft below  
A1

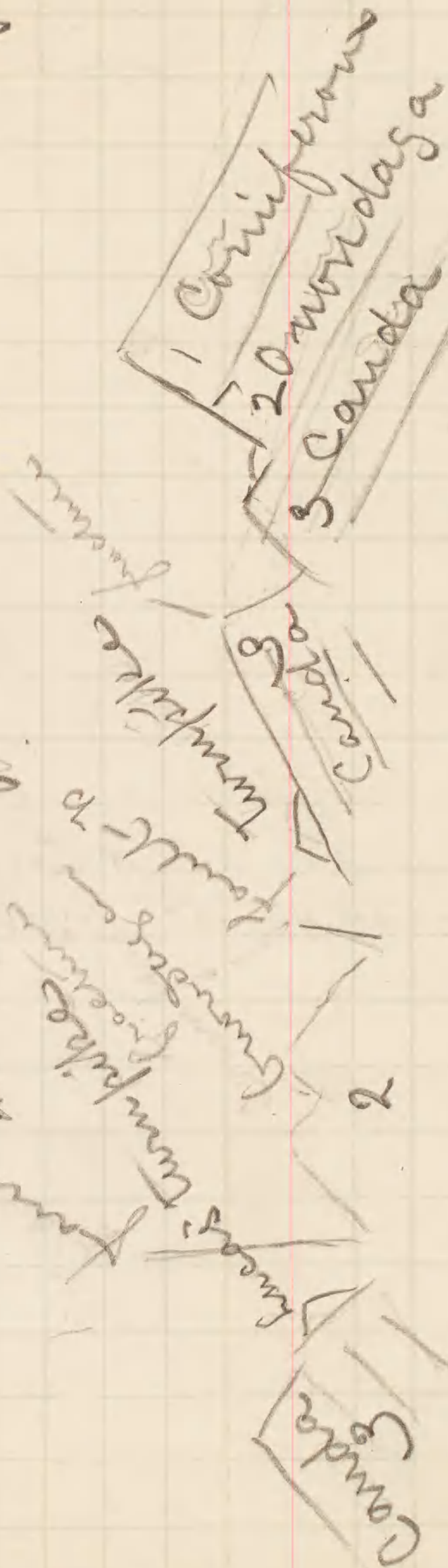
May - 6 - 89.  $1\frac{3}{4}$  mile E. of Louis  
 Birie's residence at  
 Marbletown N.Y.



The Corniferous and Onondaga  
 are well exposed along the line  
 of the Kingstone & Marbletown  
 Turnpike.

2 1/2 miles East of Marbletown. Looking south

10 5 4 B

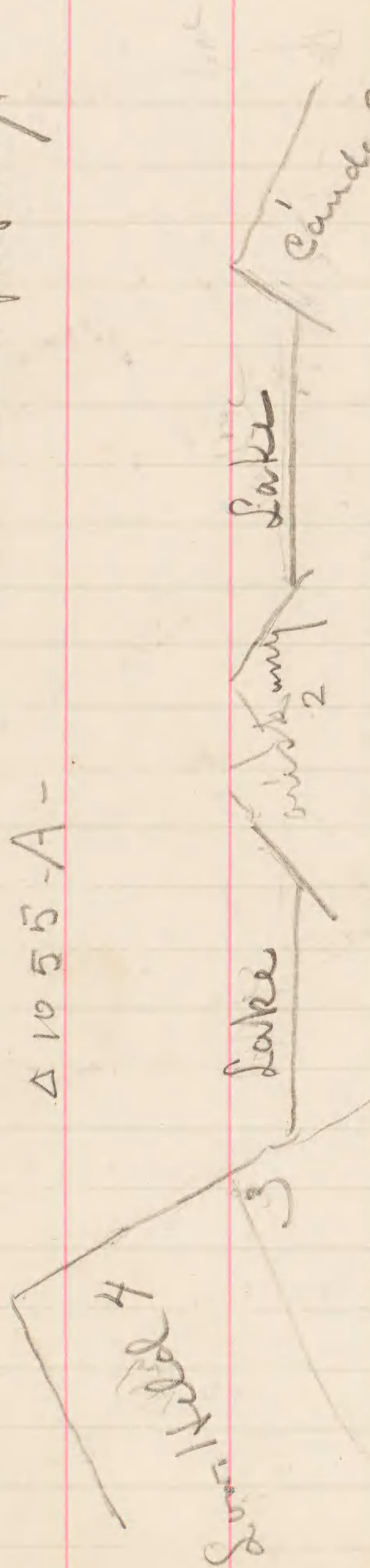


Direction of section = East + West -  
 length about  $1\frac{1}{4}$  miles.  
 Onondaga + 70 intersect at an angle of  $20^\circ$  at the fork  
 in the turnpike and extend in each direction for  
 some miles.

# 1055

at 4<sup>th</sup> Brimwaters + further S.E. than the section on page 27.

Δ 1055-A-



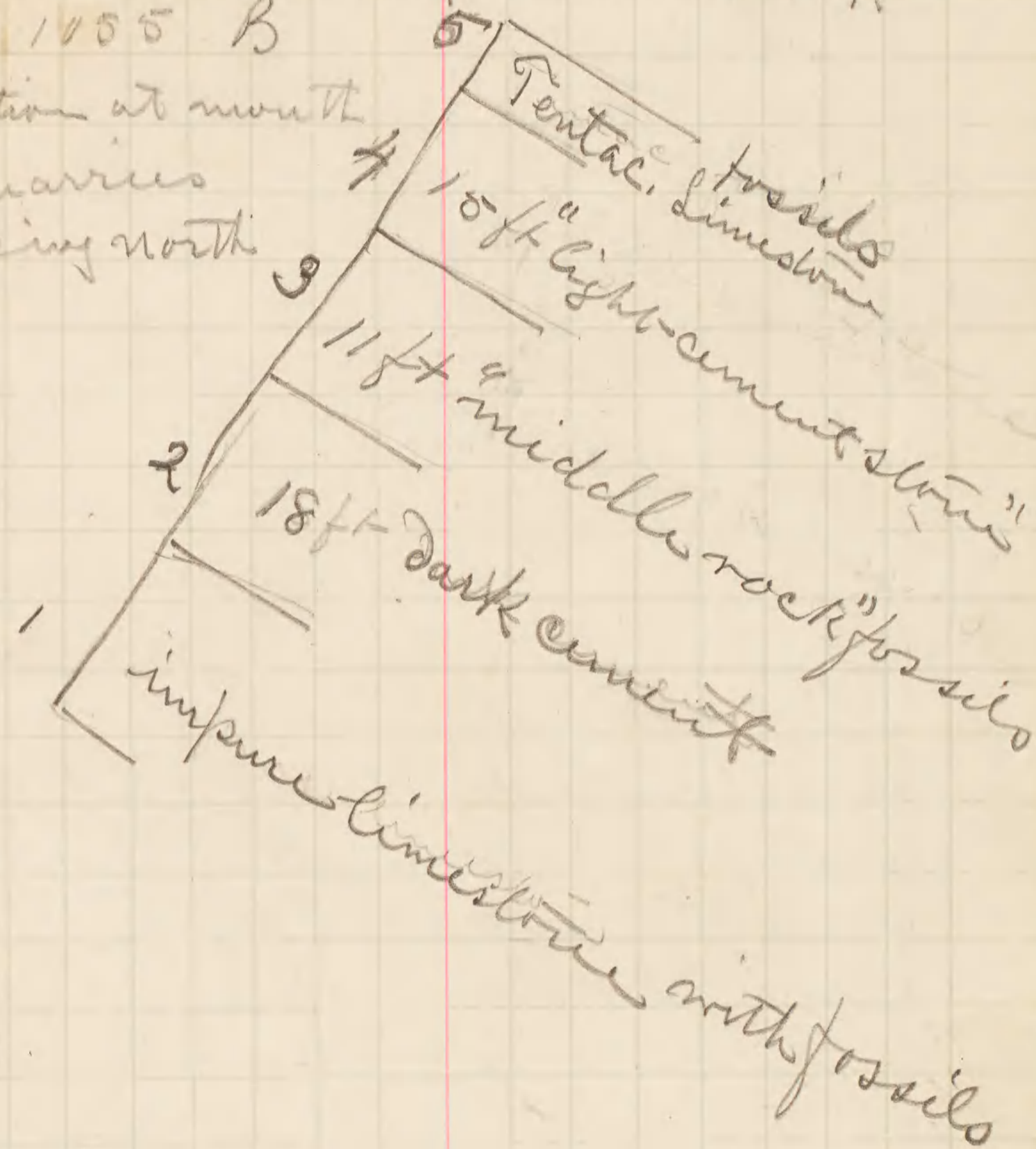
Thickness of strata not ascertained. One of the two typical specimens of *Homalotrochus* major whit. was found in 2 by Louis Benier. The rock is very hard and it is exceedingly difficult to extract any of the numerous fossils which it contains. (See 1053-A-1.)

29

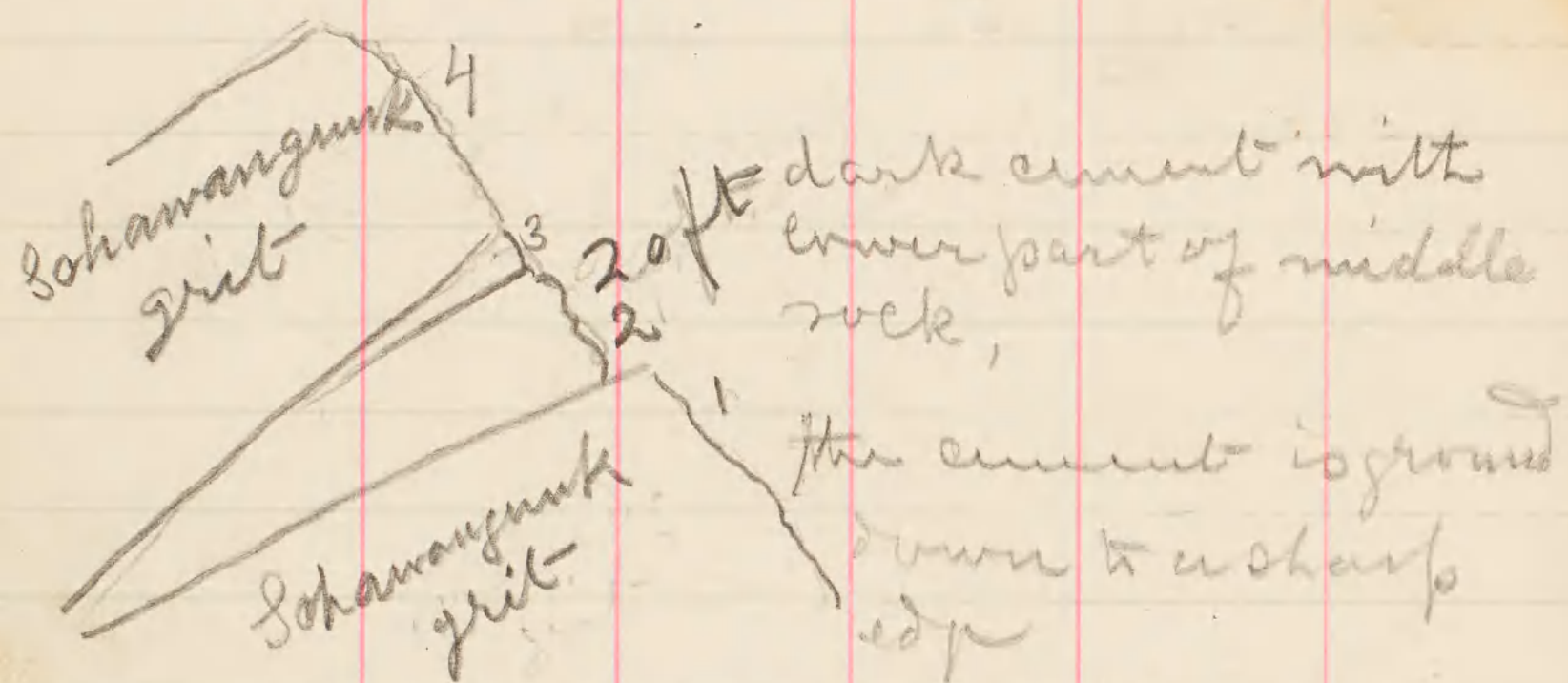
Cement Quarries at Brimwaters Sta. Rosendale twsp. Ulster Co. N.Y.

Δ 1055 B

Section at mouth of quarries looking north



Δ 1055 C The old  
hooking South in James' Quarry  
near Catholic Church at  
Rosendale.

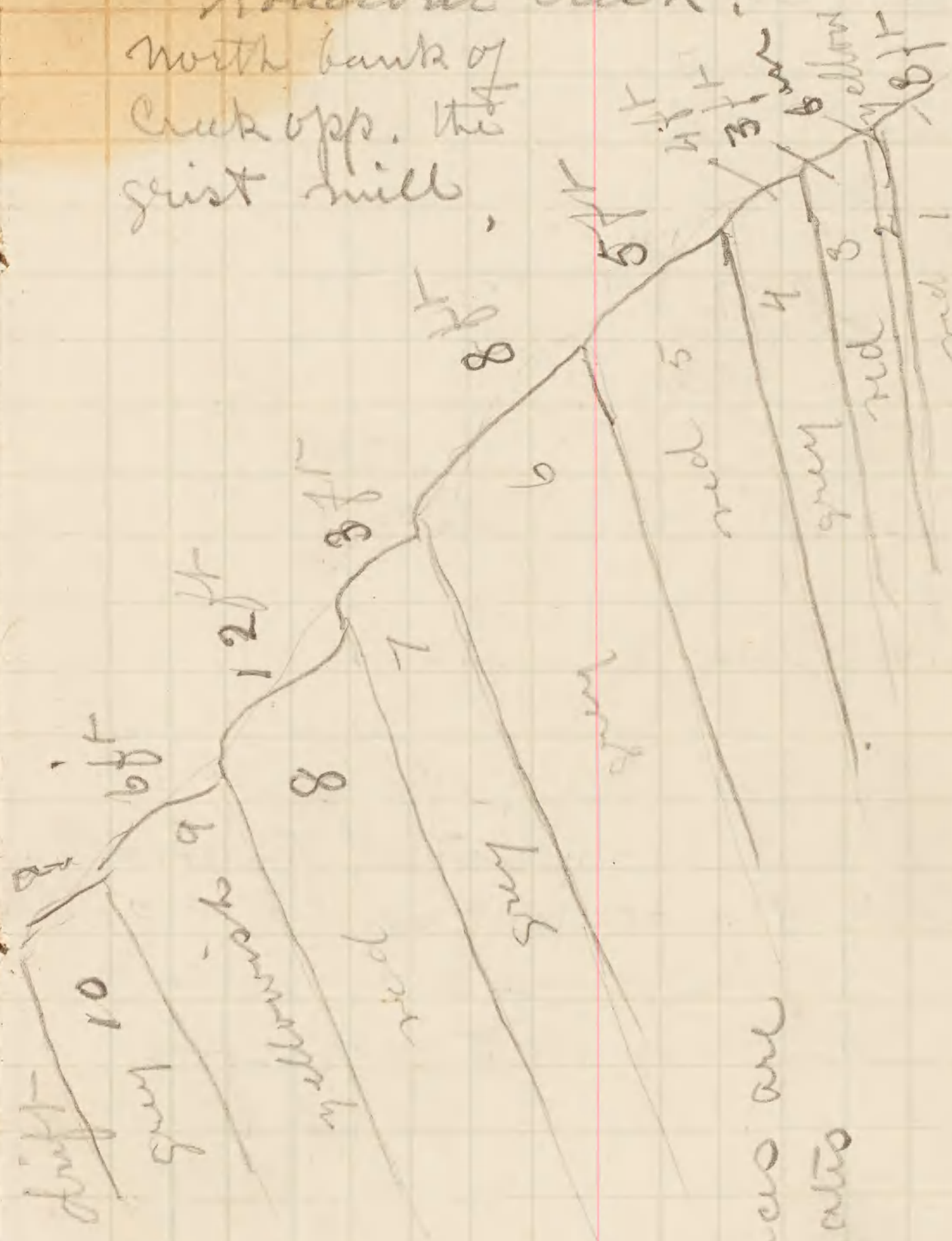


The rocks dip E. S. E.

Both surfaces of the pit are grooved on account of the grinding against the cement rock. Some of the grooves are 1 foot and may are from 4-5 inches deep.

- 1 = grit  
2 = middle rock  
3 = portion of large upper cement  
4 = grit

Δ 1056 A High Falls on  
Roundout Creek.  
North bank of  
Creek opp. the  
grist mill.



The distances are  
estimated

1056A

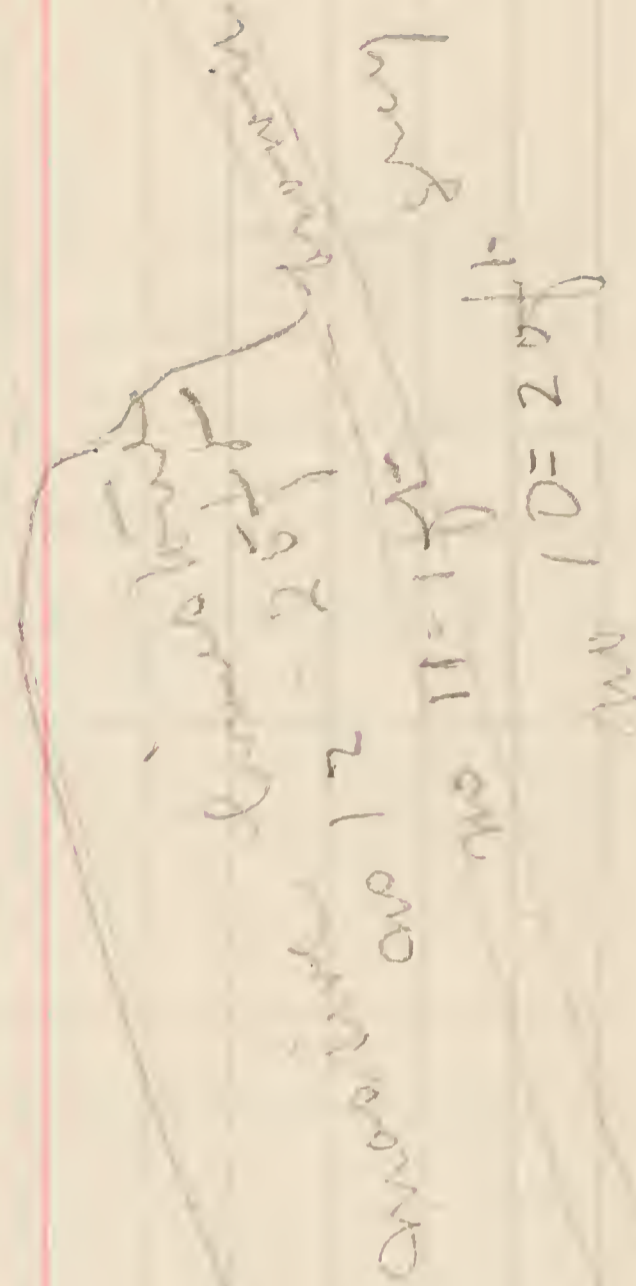


1056

A

No 12 forms the fall in the Roundout Creek.

It is the same stratum from which in other places the "dark cement" is quarried. The color changes within short distances.



Mr Louis Berier tells me that at High Falls there is a section in which all the strata from the Medina Sandstone up to the light cement which is covered by the drift. They all lie conformably upon each other.

Δ 1055-II-1

is at the Southwest corner of the 5<sup>th</sup> Binnewater Lake in town of Rosendale Ulster Co. N.Y.

It is on the slope of the hill on the west side of the Old Cranberry Dam.

It is the continuation southerly of 1055-A-2. Only the rock on the eastern side of the anticlinal axis is exposed. It is rich in trilobites.

It is the station where Mr L. Berier found one of the specimens of *Homalonotus major* which

was described by R. P. Whitfield in the Bull. Amer. Mus. Nat. Hist. for

Another specimen of the same species was found the same day by Mr Berier at  
Δ 1055-A-2.

Δ 1055-A-1

Is on the West side of the anticlinal axis of Section 1055 A.

It is on the West side of Lucas' turnpike  $\frac{1}{2}$  mile N.W. of the 5<sup>th</sup> Binnewater Lake.

Either Schoharie Grit or Canada Galt. Containing fossils. Numerous joints at right angles to planes of deposition.

May 7-89 11054 c

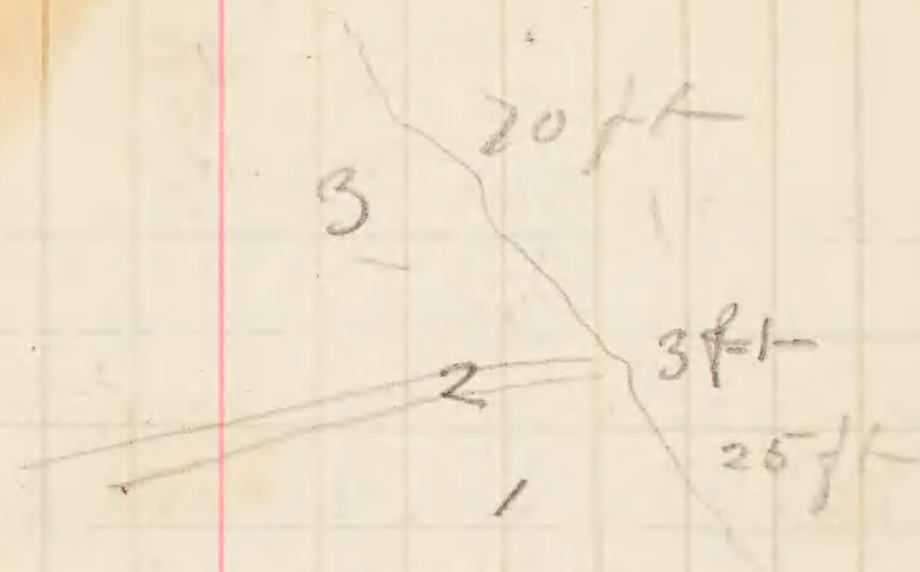
On land of Andrew Middagh  
about  $2\frac{1}{2}$  miles N.W. of  
Marbletown.

They are exposed along the  
N. bank of the Esopus C. and  
form a bluff 100 ft (eye estimate) high.

1- The rock is a fossiliferous  
coarse arenaceous sandstone and  
contains many rounded con-  
cretionary masses which are  
much harder than the rock itself.  
dip =  $3^{\circ}$  W  $30^{\circ}$  N.

100 ft further dip =  $6^{\circ}$  W  $35^{\circ}$  N.

The lower 25 ft are barren



1 and 2 are barren

3 contains fossils

The creek bed from a point  
 $\frac{1}{2}$  mile above here to  
Five City is worn into the  
Hamilton? paving stone grit.

This extends on westwardly to  
Phoenicia? and Roxbury.

2- is 3 ft of alternating hard sandstones  
which resist the weathering and  
beds of sandstones like No 3.

No 3- 75 ft of dark grey sand-  
stone breaking first into blocks  
and then into thin layers.  
It is full of fossils, Brachiopods  
chiefly a Rhynchonella and Lamelli-  
and Orthocerata.

May 8-89

Looking at Olive City Sup-Bench 50

41057 = Olive City Water Co. N.Y.

Location

A on Esopus Creek beginning  
on land of  
 $\frac{3}{4}$  miles East of Olive City P.O.

1- a rather coarse green grey grit  
at surface of water, about 2 ft thick  
dip 2 N70W barren

2- 8 ft of laminated sandy shales  
barren

3- S.S. 1 ft

4- Clayey S.S. with nodulose  
structure  $7\frac{1}{2}$  feet - green weathering  
to reddish upper part running into

5- Sandstone  $1\frac{1}{2}$  ft ~~barren~~

6- 4 repeated 4 ft

7- S.S. 20 ft thinly laminated S.S.

8- flag stone stratum 10 ft

9 the flagstone contains pebbles  
and plant remains  
and is somewhat argillaceous.

10 flag stone 8 ft

no 7 can be seen much better  
 $\frac{1}{4}$  mile above the covered bridge

It is there seen to consist of  
fissile red shale running  
into the sandstone of no 8.

8 ft  
of  
sandstone  
forming  
base of

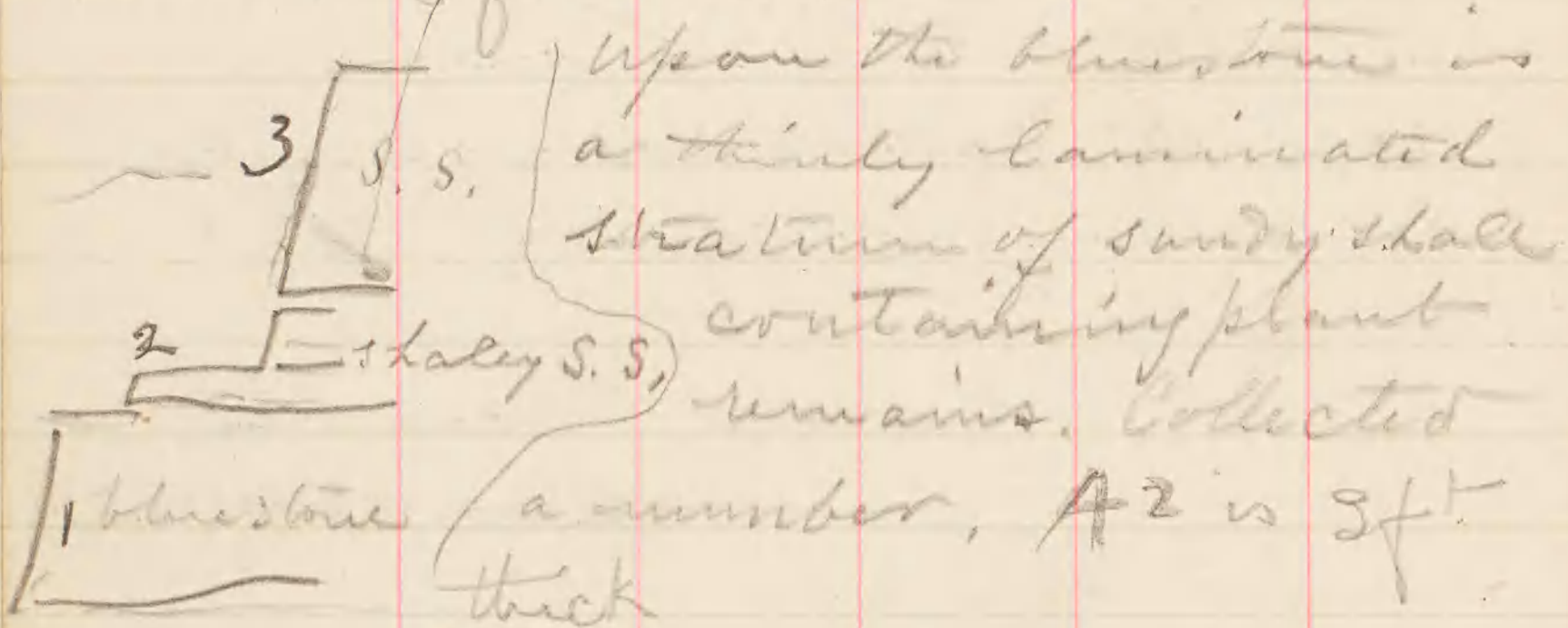
#1058

May - 9 - 89 #1058 A Lanesville W.V.

Quarry back of Frank North's house  
on West side of valley.

The rock in the lower part of the quarry  
is bluestone, rather heavily bedded.

About 6 ft thick



May 10 and 11th rained continuously

May 13 - 89 Collected more fossils  
from T. North's quarry, and hunted  
up the locations of a number of  
other quarries in the vicinity

May 14 rained

May 15 - 89 A.M.

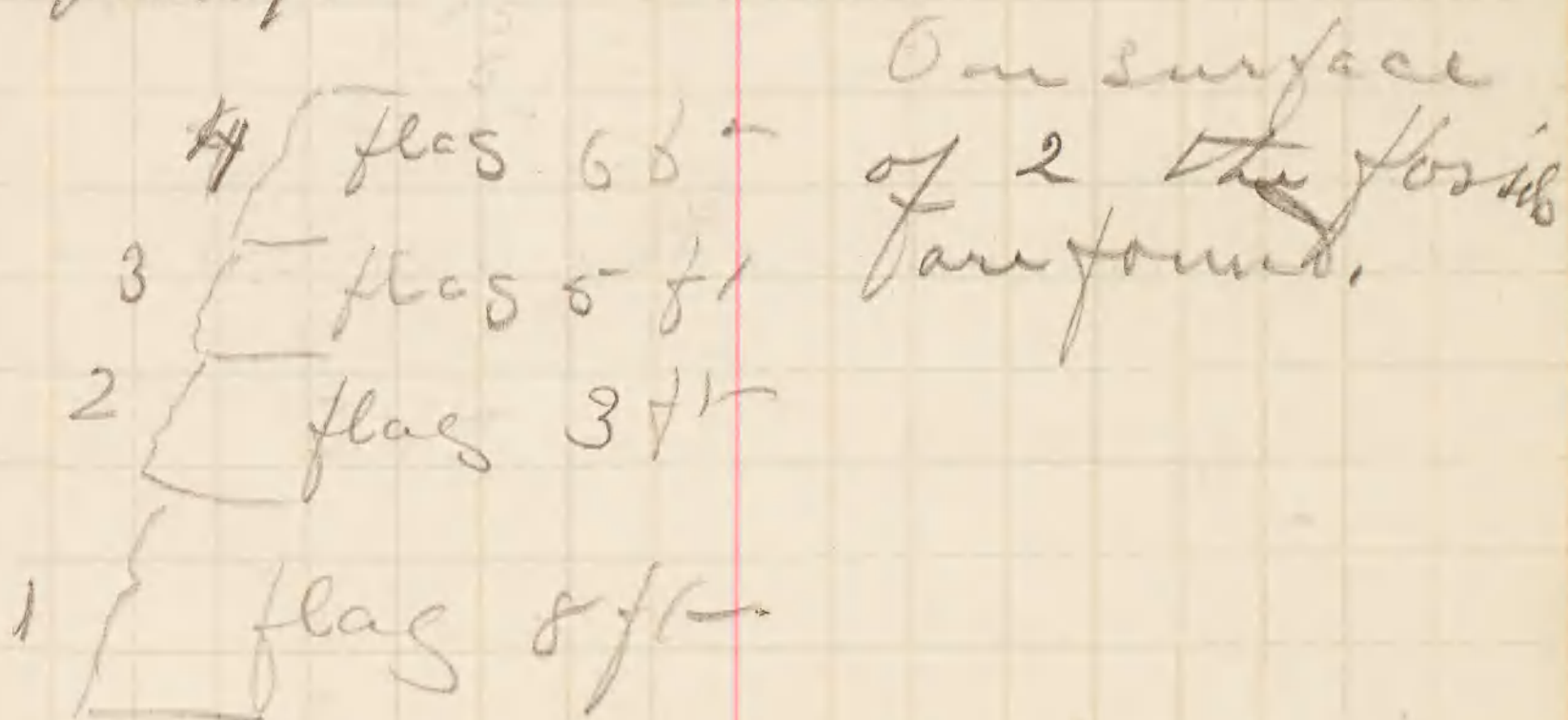
Ascertained height of T. North's quarry  
above the railway Sta. to be 40 ft  
(by Locke). The quarry is on the N.W.  
side of the valley about N40°W of  
the S.C. + C.M. R.R. Sta.

The altitude A.T. is not given in  
Gannett's Dictionary of Alt. of N.A.

Alt. A.T. <sup>of track</sup> is 1332 ft (R.R. Survey)  
1058 B.

J. Janssen's old quarry on mountain  
in front of his house is 250 ft (Locke)  
above the R.R. Sta.

It strikes about the middle of the  
high cliff 200 ft above Frank North's  
quarry.



May 16-89 Lanesville N.Y.

Quarry No 1

Edw. Lanes' Quarry on hill back of his house  
is about 70ft above the bridge on road  
near his house. (Locke)

Quarry No 2 1058.0

300ft further N.W. of No 1  
alt. above the bridge 105ft (Locke)  
plant fossils fine

3 flagstones 6ft

2 shaly plants 3ft

1 flagstone thick?

In P.M. packed up box from 1058  
will be expressed in a day or so

May 17-89.

Left Lanesville on 8.30 A.M.  
for home.

On way down M. & D.R. R.  
saw fine exposures of rocks  
looking like the Whate-Channing  
in the vicinity of Stony  
Hollow and along R. R.  
from there to Kingston.

Altitudes A.T. of Stony Clove +  
Catskill Mt R.R. in Greene Co N.Y.  
Furnished by Geo. Wy Kendall, Genl /  
Supt. May 20th 1889.

Chicksters	1012 ft
Flynns	1148
Laureville	1332
Edgewood	1778
Stony Clove	2070
Kaaterskill Jc.	1723
Hunter	1602

## Maine trip

45

May 20 - 89

Left home on 6.30 P.M. N.Y. Co  
H. R. R. for Boston via Albany  
en route to Paris Pond Me.

Reached Ender which is as  
far north as the R.R. runs  
on the afternoon of the 21<sup>st</sup>.  
From there went by stage to  
Bingham where put up  
for the night.

May 22 The rocks about Bangham  
appear on early exam. to be all  
micaceous schists.

Dip  $90^\circ$  Strike N60E

At noon took stage for the Torks.

May 23 - Left Torks in Am.  
by stage for Parlin Pond.  
Arrived there at noon.

May 24<sup>A</sup> 1059 Parlin Pond Somerset  
Co. Me.

Many boulders containing fossils  
were found on the hill immediately  
back of the hotel.

The rock is a tough bluish gray  
sandstone weathering to light  
gray.

An outcrop occurs on the  
North shore of Parlin Pond. No  
fossils found in it. Dip  $35^\circ$  E  $45^\circ$  S

No rock on East shore

May 25 1059-X'. A Boulder on  
west shore of Parlin Pond full of  
fossils. @

Examined West shore of lake.  
Many boulders with fossils were found.  
No bed rock on West shore.

May 26 Sunday.

May 27 -

Hired a man to drive me to  
Moose River 15 m North of Parlin  
Pond to look for a guide. Succeeded  
in finding one, a young man, a  
"river driver" who is well acquainted  
with the region to be looked over.  
I asked him to report at Parlin P.  
the next day (Tuesday). Pay to  
commence from time of engagement.

1059

May 28 Bald Mt

At noon started out with guide to ascend Bald Mt 5 mi S.W. of Parlin P.D. There are two interesting ponds one on each side of the ridge & separated from each other by a narrow neck of land. A heavy gray sandstone on top dip  $90^{\circ}$  N  $15^{\circ}$  W no fossils

May 29. In early A.M. went up on to the highest peak. A very high wind was blowing and a snow storm in full blast, very cold. Everything frozen. No bedrock was seen.

In afternoon returned to hotel.

49

May 30 W. of P. P. A.M.

In morning with guide examined the hills back of Parlin Pond (West) No bedrock was seen.

Many fossiliferous sandstone boulders were found.

In afternoon went along north shore of lake, A sand stone whitish on its weathered surfaces but bluish grey in its interior outcrops for  $\frac{1}{6}$  mi along the shore. its dip  $35^{\circ}$  E  $45^{\circ}$  S.

The rock is extremely hard.

At one point some impressions in the rock look like fossils.

1059

1059 C  
May 31. Parlin Stream

X" boulder of very white S.S. = +6 or +8.

The sections begin on Parlin Stream at the middle dam where the stream runs for over a mile through sandstone & slates.

in C<sup>-5</sup> there is a 2 in layer of very soft shale 4 1/2 ft above C<sup>-6</sup>

In some place -12 is brown in others gray & in others again almost white.

-12 is shaly toward the bottom where in addition to the species it contains above it contains some others.

1059

1059 C

- |     |                      |
|-----|----------------------|
| 0   |                      |
| -1  | 4 ft thick barren    |
| -2  | 7 ft " fossils       |
| -3  | 6 in fossils         |
| -4  | 13 ft barren         |
| -5  | 8 ft barren          |
| -6  | 1 ft shaly very soft |
| -7  | 9 1/2 ft barren      |
| -8  | 135 ft barren        |
| -9  | 7 ft fossils few     |
| -10 | 1/2 ft slate         |
| -11 | 2 ft barren          |
| -12 | 40 ft                |

-12

- |  |      |
|--|------|
| 1 ft fossils                                     | S.S. |
| 6 ft barren                                      | S.S. |
| 2 ft fossils                                     | S.S. |
| 7 ft barren                                      |      |
| 24 ft S.S. thin layers with fossils on surfaces. |      |

51

1059 C

+ 9	25 ft bluish S.S. with <sup>barren</sup> quartz veins
+ 8	6 ft white S.S. barren
+ 7	1 ft S.S. blue with <sup>barren</sup> serpentine?
+ 6	1/2 ft white S.S. barren
+ 5	110 ft blue S.S. barren
+ 4	6 ft shaly
+ 3	1/2 ft fossils S.S.
+ 2	6 ft blue very hard barren S.S.
+ 1	1 ft fossils
C 0	36 ft bluish very hard barren S.S.

C+8 and C+6 are soft like gneiss

C+7 is thinly laminated at top and is ironaceous.

1059

58

June-1-89. In morning packed up box of fossils from "1059". At noon took box with me by stage to Jackmantown. Sent box by C. P. R.R. via Greenville.

June-2 - Sunday. Jackmantown Me.

June-3-89.

In morning went by canoe up into Wood Pond and thence into Attam Pond.

Examined the shores of both Lakes in search of the northern limit of the Oriskany.

Spent June 3<sup>rd</sup> and the morning of June 4<sup>th</sup> in searching the shores.

The ledges of which there are many are all of granite.

June 4-89.

In morning continued searching the shores of Ottau Pond.

All the ledges seen are granite.

About noon returned to Jackman town.

In afternoon went with guide along the line of the C. P. R. R. East of Jackman town.

Found a ledge of blue slate 4 miles below Jackman town dip  $45^{\circ}$  N - unfossiliferous.

June 5-89-

At 9.30 Am. started down Moose River. In morning it began to rain hard and continued all day. As I was not feeling well we pitched camp about 3 mi below Jackman town, and we spent the night there.

1060

A

June 6-89-

Long Pond  $\Delta$  1060

$\Delta$  1060 - A -

At northwest end of Long Pond are three ledges of slate forming islands in the lake.

No 1 is nearest the inlet and to the northeast of it.

The rock is a dark fissile slate about 50 ft thick.

The dip is  $55^{\circ}$  N  $20^{\circ}$  W.

unfossiliferous

No 2 About 100 yds N.E. of No 1 - same rock - same dip - thickness 10 ft.

No 3 - about 300 yds north of No 1 same rock - etc. thickness 25 ft.

1060  
A

No 4 - a ledge on north shore at  
Hugh Redmonds farm called  
by the lumbermen "The Joe  
Ledge". It is about  $\frac{1}{4}$  mile  
S.E. of No 3.  
The thickness is about 375 ft  
thick - dip  $55^{\circ}$  N  $20$  W.

June 7-89-

In AM. took letter up to  
Sturgis farm where it will be taken  
to Jacksonton on Monday.  
As a raft of logs was almost  
at the mouth of the river we  
hurried down the lake and  
entered the rapids. The river  
for 6 miles is quick water, &  
was very exciting work going  
through.

1061  
A

57

Camped on Little Brussa  
Lake that night.

On the way down fossils were noticed  
in the ledge at Stony Brook,  
Left for examination until  
return trip.

June 8-89 - "1061 Sandwich trip  
Little Brussa Lake

1061 A on south shore of Little  
Brussa Lake - along the  
line of C. P. R. R.

The section begins at the  
237 mile mark and extends  
about  $\frac{3}{4}$  m. along the R. R.  
track eastward.

A<sup>0</sup> is a heavy bedded sandstone  
barren - thickness unknown.

1061  
A

A<sup>1</sup> 130 ft East of A<sup>0</sup> to 15 ft  
in thickness - barren -  
bluish gray on new surface but  
weathers to gray ~~and blue off~~.

A<sup>2</sup> 15 ft thick hard blue  
compact S.S. weathering to  
whitish dip 43° N 10° W barren

A<sup>3</sup> is 1230 ft directly ESE of  
A<sup>2</sup> - thickness 60 ft  
it is more shaly than A<sup>2</sup>  
□ 62° N 10° W. 28 ft from its  
lower surface fossils were  
found.

~~A<sup>3</sup> forms a cutting 150 ft long.~~

A<sup>4</sup> 1140 ft E of nearer end of  
A<sup>3</sup> - a hard heavy bedded S.S.  
blue, weathering to gray 6 ft thick

A<sup>5</sup> a bluish brown shaly sandstone  
containing fossils - 8 ft thick.

1061  
A

59

A<sup>6</sup> Hard sandstone with round  
vertical borings - 8 ft thick

A<sup>7</sup> Heavy bedded S.S. light blue  
gray - 15 ft thick barren -

A<sup>8</sup> 12 ft shaly dark surfaces  
laminated barren -

A<sup>9</sup> 12 ft blue gray S.S. like  
A<sup>7</sup> for fossils.

A<sup>10</sup> 15 ft blue laminated shaly  
sandstone barren like 8

A<sup>11</sup> 50 ft hard bluish gray like 9  
barren

A<sup>12</sup> 10 ft laminated shaly S.S.  
with fossils.

30 ft drift

A<sup>13</sup> 10 ft hard heavy bedded  
sandstone barren

After finishing this section we  
started down the river for  
Rrassna lake.

1062  
A

1062  
B

61

△ 1062 Big Brassa Lake

△ 1062 - A - On West Shore of lake commencing with A<sup>1</sup> a low ledge on first point about 1/2 mile from inlet (Moose River)

A<sup>1</sup> M<sup>1</sup> is a rather solid shale with very fine fossils - it dips 25° E 10 S.

Continued along shore to a point near the mouth of Brassa Stream (where we stopped for dinner)

After dinner went up stream and ran the following section

△ 1062 - B Brassa Stream  
B<sup>1</sup> is a ledge under water about 2 miles above the lake.

B<sup>2</sup> A ledge of shaly S.S. forming a fall in stream about 2 1/2 miles above the

62 (1062 B)

A 1062-B - Brassa Stream  
continued.  
lake. It dips  $28^{\circ}$  N10W  
2 fossils? were found in it.

B<sup>3</sup> is the same rock with  
same dip exposed 100 yards  
up stream

B<sup>4</sup> is same rocks same dip 1000  
yards further (above B<sup>3</sup>)

B<sup>5</sup> same - 200 ft further

B<sup>6</sup> same rock - same dip -  
300 ft further one fossil

B<sup>7</sup> 200 ft further the same  
rock is exposed but contains  
very many fossils.

B<sup>8</sup> 100 ft further same rock  
with a few fossils

B<sup>9</sup> 250 ft further same  
rock no fossils

a  
62

B<sup>10</sup> 200 ft further same  
rock no fossils -  
dip  $57^{\circ}$  N10W

This is as far as we could go  
in canoe.  
Went away down stream +  
camped for night.

June 9-89 - Sunday

Rained all day - came  
down stream and pitched  
camp on East shore of Lake  
about 4 miles from outlet

1062  
C  
62

June 10-89-

1062 C - East shore of  
Brassna Lake

1062 C' is on East Shore 2  
miles below inlet of Brassna  
Stream. A ledge making out  
into the lake.

A hard siliceous laminated  
sandstone. Color blue gray  
weathering to brown gray  
many quartz veins intersect-  
ing in various directions  
Dip  $90^{\circ}$  Strike W 20 S  
Barren of fossils.

If continued across the lake  
it would strike the West  
side about  $3/4$  mi. north  
of 1062 A'

1062  
C  
62

63

1062 C<sup>2</sup>

On point forming the North  
shore of Woodchuck Cove.

A very thick bed of barren  
sandstone.

The rock is traversed in all  
directions by joints so as to  
make the determination  
of the dip impossible.

1062 C<sup>3</sup>

On point  $3/4$  mile below  
(mouth of) the East<sup>4</sup> station near  
the smaller of the two islands  
3 miles from the outlet.

The determination of the dip  
is difficult.

Numerous nearly parallel  
lines traverse the bed in  
a W 20° S direction. These  
lines are not continuous.

Some fossils were found  
lying in another plane than  
that shown by the lines

1062  
C

above mentioned. If the plane of the fossils determines the plane of deposition of the rock then the rock dips  $18^{\circ} N 28^{\circ} W$

If the dip is  $90^{\circ}$  the exposure is 145 ft thick in a  $S 28^{\circ} E$  direction. If  $18^{\circ}$  is the dip then the thickness can be ascertained from the measurement of 145 ft

1062 C4

Point at base of two islands 2 m from outlet being 1 m South of C3.

Dip  $55^{\circ} N 20^{\circ} W$  as determined by fossils. The rock is of a schistose character with mica & iron oxide.

The large island is a continuation of the ledge on shore.

1076  
B

1076 Moosehead Lake Me.

65

June - 11 - 89 - 1076 B -  
on South and East-shore of  
Farm Island on Moosehead  
Lake.

B<sup>1</sup> On South shore -  
a thinly laminated grit  
dips vertical - strike  $W 20^{\circ} S$   
(A very few fossils?)  
The rock is a blue gray weathering  
to iron gray and red.  
One specimen of *Epirophyton*  
*Canda Balli* was seen.

B<sup>2</sup> hard sandstone on North  
shore of first cove going up  
the East shore and forming  
ledges making out into the  
lake for 2 miles up the  
shore.

B<sup>3</sup> Where the rock changes  
abruptly to a dark fine grain  
clay shale. A specimen of  
B<sup>2</sup> was collected and one  
of B<sup>3</sup> only 1 ft from it.

1076  
B

The point where B3 is exposed is about directly north of B1 and about  $1\frac{1}{2}$  mile from it (by air line)

B3 is the last ledge on the East Shore.

Cooked our dinner on the North end of the island and then paddled over to Succatun Stream.

1076  
C

67

June 12 - 89

A 1076 C Succatun Stream.

C<sup>1</sup> is a ledge under water about  $3\frac{1}{2}$  miles above the lake.

C<sup>2</sup> on the right bank about 300 ft below C<sup>3</sup> - a dark fissile shale without fossils  
dip  $73^{\circ}$  N  $20^{\circ}$  W

C<sup>3</sup> forms the first fall - a ridge across the stream - shale -  
dip  $75^{\circ}$  N  $20^{\circ}$  W strike W  $20^{\circ}$  S  
thickness about 30 ft  $\pm$   
About 4 miles above the lake.

C<sup>4</sup> on left bank  $\frac{1}{2}$  mile above first fall - a ledge<sup>2</sup> in woods about 50 ft back from the stream. Same rock as C<sup>3</sup>.

C<sup>5</sup>  $\frac{1}{4}$  mile further up - same rock - barren -  
dip  $90^{\circ}$  N.

1076  
C

C<sup>7</sup> - At Devil's Elbow 2 miles below dam - a fair exposure of shale.

C<sup>8</sup> - About 1/4 mile below Clark's Second Mining Camp on left bank - About 1 1/2 miles below the dam - A low ledge of the same shale

C<sup>9</sup> At dam 8 miles above Lake a fine exposure of the shale which here contains cubical crystals of iron pyrites. no fossils. Thickness about 80 feet.

1076  
D

69

June 13 - 89

41076 D Along shore from Loccation Stream to drivers store house

D' At mouth of Loccation Stream a ledge of same rock as C<sup>3</sup> on the stream  
Dip 90° strike W 20 S @

D<sup>2</sup> is 1/4 mile N 40 W of D' @  
The rock is slightly different  
D<sup>2</sup> is stratigraphically above D' - All following are below D'

The next ledge comes between D<sub>1</sub> and D<sub>2</sub> on the opposite side of the core.

The next is D<sub>1</sub> continued across the core.

D<sub>3</sub> The next D<sup>3</sup> is about 1/2 miles from D<sup>2</sup> and shows a thickness of 200 ft @

(1076)  
D

II<sup>4</sup>  $\frac{1}{4}$  m from D<sup>3</sup> has some  
ironiferous bodies in it  
5 ft thick C

The island is of the same rock

II<sup>5</sup> forms the next point  
850 ft thick

dips  $47^{\circ}$  N  $20^{\circ}$  W.

II<sup>6</sup> About 700 ft south of the last  
exposure of the shale

A hard sandstone - heavy  
bedded, no fossils C

Near the island  $1\frac{1}{2}$  m N-E  
of mouth of Tomigan stream  
and N  $20^{\circ}$  W of house on head  
of Farm Island.

At this point the section was  
abandoned on account of the  
rough water.

(1076)  
E

June-14-89

A 1076 E  
Point.

Shore of Succatun  
Point.

E<sup>1</sup> is on the end of the point  
A shaly sandstone with an  
abundance of fossils.

The Shaly rock on the Succatun  
Stream changes to a heavy sand  
stone below the mouth of the  
stream. Near the end of the  
big point there is a small  
point and on this small  
point is the locality where the  
fossils occur.

E<sup>2</sup> On East side of point with  
fossils - dips  $9^{\circ}$  N  $20^{\circ}$  W

To the north the rock  
changes from the heavy sandstone  
to a shaly sandstone. Fossils

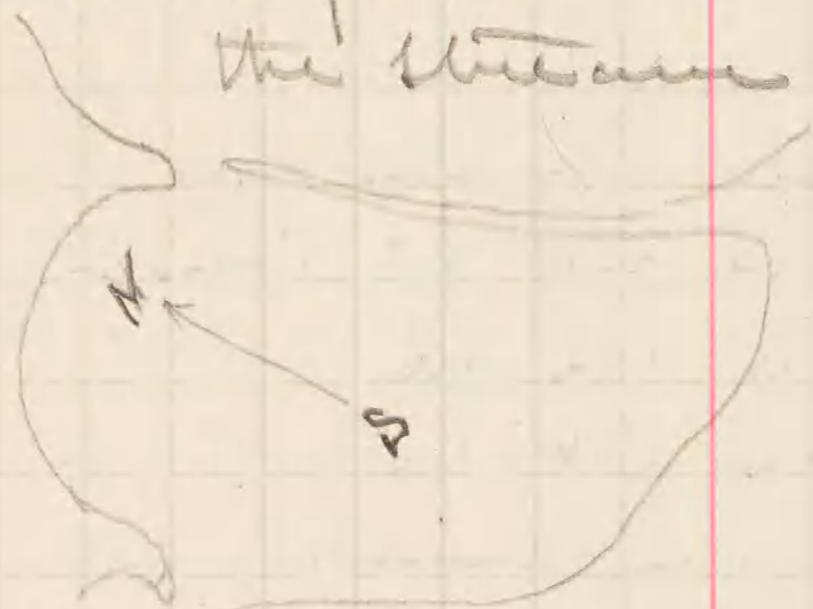
E<sup>3</sup> were found in this a point  
south of Moose Brook near the

1076  
E

island. The dip is  $90^\circ \text{ N } 20^\circ \text{ W}$   
There is a layer with ripple  
marks. The inclination of the  
ripple marks is  $50^\circ$ .  
One foot above the ripple mark  
layer is the layer with the fossils  
which is 3 inches thick. E  
Above it there is a sandstone  
stratum 4 inches thick. E  
E4 on north side or upper part  
of ledge - a thin band of fossils  
in the sandstone. E  
The thickness of E3 + E4 is  
about 100 ft.

73

June 15-89 - to N.W. Carry  
At the mouth of Williams Stream  
is a fine sandbar about 200 ft  
long by 10 ft wide. The bar seems  
to be fast closing the mouth of  
the stream.



June 16-89 Sunday  
Returned to our camp on  
Locust Creek

1076  
D

June-17-89

1076-D-continued.

In A.M. took up 1076 D  
where we had left it on the 13<sup>th</sup>

1076 D/ Shale on the second  
island from mouth of Tombigbee  
stream. It is very much  
jumbled up on account of a  
trap dike that runs up  
through it. The traps are  
from 6 inches to 1 ft thick.  
The shale is barren.

D 8 is a heavy sandstone  
It is probably the  
continuation of D 6  
It dips 45° N 20 W  
Rock barren.   

No bed rocks is seen  
until the cove of Baker  
Brook is reached.

75

D 9 A heavy sandstone  
along the shore at the  
mouth of Baker Brook  
Dip is 90° Strike W 20 S  
barren   

? (This is possibly the westerly  
continuation of D 8-D 6-  
and B 2)

The same sandstone is  
again seen on the south  
side of the point south of  
Baker Brook.

In the early afternoon  
arrived at Pens and began  
to pack up my collections.

1061  
B

June 18-89

Spent the whole day packing  
up my collections.

June 19-89 Started up river on  
return trip

Stopped off at Stony Brook  
on the Long Pond Rapids.

1061 B'

The rock is a hard tough  
sandstone, shaly in some  
places. The greater number  
of the fossils are in the shaly  
parts. Dip  $45^{\circ}$  S  $20^{\circ}$  E

A fine locality.

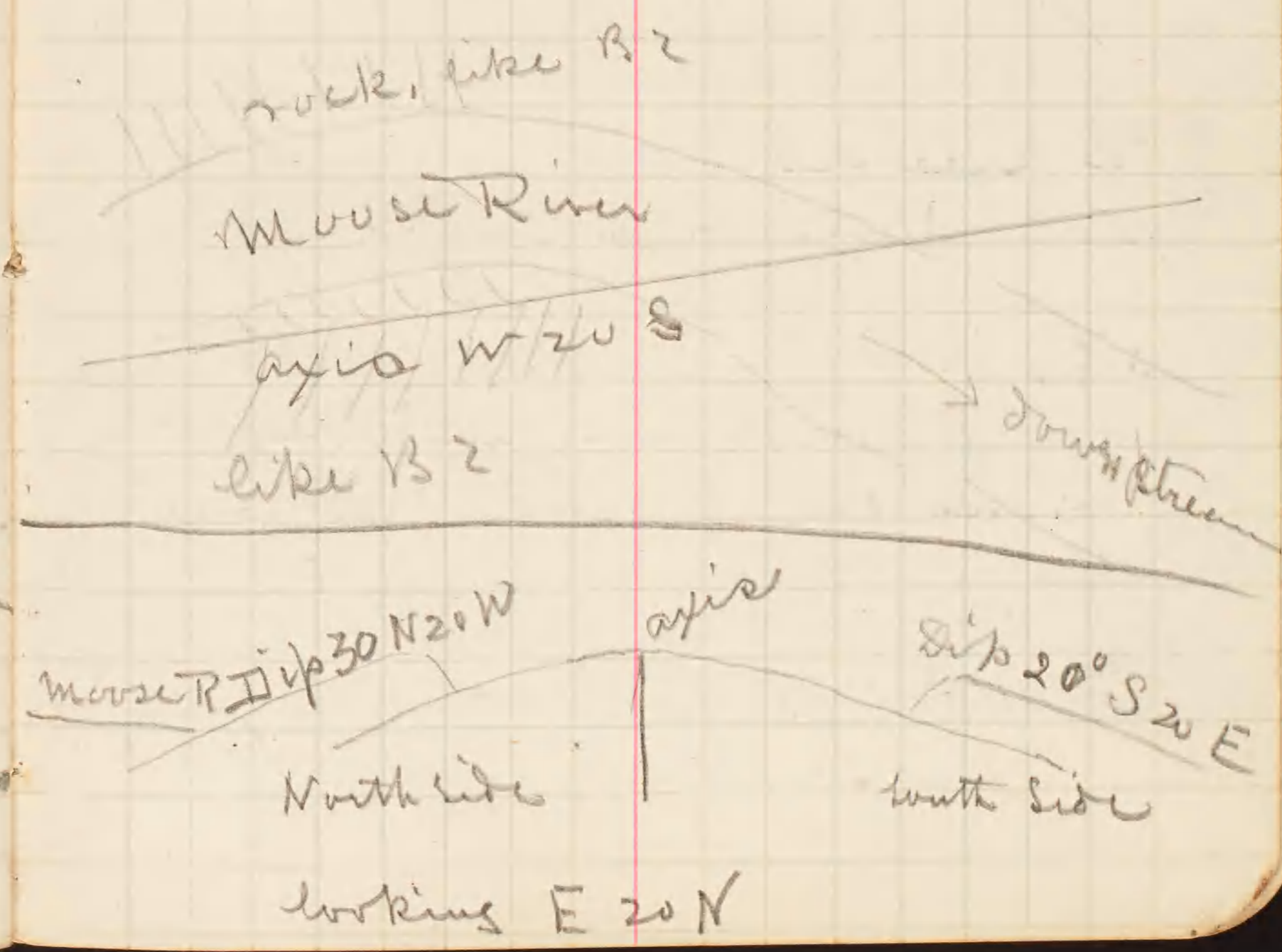
1061  
B

June 20-89 1061 B 2

A ledge about  $3\frac{1}{4}$  m.  
above Stony Brook

A hard barren sandstone with  
veins of quartz  
Dip  $55^{\circ}$  N  $20^{\circ}$  W.

B<sup>3</sup> At "Burnt Dam" (1 m above  
Stony Brook)  
here an anticlinal  
axis crosses the stream



June 21-89 Went up Parlin  
Stream.

Examined a hill of hard sandstone  
on the left bank. — miles  
up stream. no fossils.

June 22-89 1059C. continued

Went up stream to continue  
the section.

The section is measured down  
stream as the rocks tilt  
S-E and the stream flows  
N-E so that in descending the  
stream one ascends geologically.

1059  
C

79

4 1059C+9 upon the stratum  
forming +9 of page 52  
there lies about 40 ft  
of gravel.

C+10 At the second bend in the  
stream (2<sup>nd</sup> below +9) is  
a dark somewhat fissile  
shaly sandstone 5 ft thick  
and containing fossils.

C+11 3 inches of fissile  
shale - The surfaces covered  
with beautifully colored iron  
deposits. Dip 25° S E  
many fossils

C+12 has no iron covered  
surfaces and is barren  
4 ft thick

C+13 is like +11 with many  
fossils and is 6 ft thick

C+14 is a heavy bed of sandstone  
4 ft thick & barren

1059  
C

1059 C

+10 +11 +12 +13 +14 form  
a cliff on the right bank  
of the stream about  
1 mile above the mouth  
of Lanes Brook

Found 3 boulders 1059C 4-W-2  
in the bed of stream at lower dam.  
They all contain very fine fossils.

June 23 - Sunday

Changed camp. to headworks  
at mouth of Parlin Creek

1059  
D

1059 D

81

June 24 Jackson Farm, on  
Canada Road in town  
of Jackson. 10 miles  
south of Moore River Settlement  
+ 5 miles north of Parlin  
Pond.

The section commences with

D' on East side of Canada Road  
at Bear Brook 3 m. north  
of Parlin Pond Hotel.  
A massive bed of sandstone  
of unknown thickness  
with fossils on some layers.  
The rock is very tough and grey.  
Dip 18° E 20 N.

D<sup>x</sup> A sandstone boulder with Orthoceras

D<sup>2</sup> Blue sandy chert - many fossils  
Dip 20° E 20 N.

D<sup>3</sup> In reading no 13 a boulder with a  
coral C

D<sup>3</sup> lowest outcrop (no 19) of slate  
fossils C

D<sup>4</sup> slate unfossiliferous, few fossils  
Dip 15° E 20 N.

The following readings <sup>(by horse level)</sup> are taken along the road ascending in a northerly direction Done in order to compute thickness of strata

remarks	Bearing	alt (ft)	distance (ft)	no. of readings
low part B'				
sandstone	N 16 W	5 1/4	42	1
sandstone	N 14 W	5 1/4	69	2
sandstone fossils	N 40 E	4	18	3
drift	N 10 W	7	345	4
"	N 20 W	37	378	5
"	N 16 W	11	162	6
"	N 25 W	24	390	7
"	N 25 W	0	750	8
"	N 20 W	7	90	9
"	N 10 W	5 1/4	192	10
"	N.W.	11	336	11
D <sup>2</sup> slate ledge	N 20 W	9	831	12
watering trough	N 20 W	10	507	13
drift	NW	6	300	14
"	N 25 W	7	156	15
"	NW	12	429	16
"	N 30 W	30	699	17
"	N 10 W	40	540	18
D <sup>3</sup>	N	10	105	19
Jackman House	N	120	2340	20

1060  
B

1060 B

83

June 25 - Long Pond.

Went up to lake to Whitney Ledge on South shore 1/2 mile west of Parlin Stream

B' in cutting on C. R. R.

2  
1 sandstone very hard much pitted - much iron pyrites - few fossils - dip 15 S 20 E 30 ft thick.

B<sup>2</sup> laminated sandstone upon B'. much broken up no fossils - interstratified with thin bands of soft shale thickness 18 ft.

B<sup>3</sup> on north shore a 1 mi sandy shale - two fossils - dip 10 S 20 E -

B<sup>4</sup> on South shore 5 1/2 miles from outlet. many fossils

1060  
B

dip  $20^{\circ}$  S  $20^{\circ}$  E  
thickness 40 ft -  
thin layers with fossils are  
in the otherwise barren  
sand stone

B<sup>5</sup> At old Pat McKinney Place  
at upper narrows, a  
large ledge of sandy slate  
dip  $55^{\circ}$  N  $20^{\circ}$  W. no fossils  
For the distance of 3 miles  
the same slate is exposed along  
the shore of the lake, until  
the inlet is reached

A few slate ledges appear in  
the river. The dip is  $55^{\circ}$  N  $20^{\circ}$  W  
and the rock of the same  
character as that on the  
lake.

Reached Jackman town  
supper.

P5-

June 26 - Packed fossils all  
day. Left for Uthman at  
12 P.M. on C.P.R.R. via  
Montreal reaching there  
at 9.45 A.M. on the 28<sup>th</sup>.

87



Altitudes A. T.

U. S. G. S. Station numbers  
 in Ulster and Greene Cos N.Y.  
 1053 Esopus Ulster Co. N.Y.  
 1054 Marbletown Ulster Co  
 1055 Rosendale Ulster Co  
 1056 High Falls Ulster Co  
 1057 Olive City Ulster Co  
 1058 Lanesville Greene Co

in Somerset Co. Me.

1059 Parlin Pond Twp.  
 1060 Long Pond  
 1061 Sandwich Twp  
 1062 Brasma Lake  
 1076 Moosehead Lake

Boxmont to H. S. W. Ithaca

- 1 Kingston N.Y. 1053 Apr 28
- 2
- 3 Mt Marion N.Y. 1053 May-2-89
- 4 Marbletown N.Y. 1054-5+6 May-7-89
- 5 Shokan N.Y. 1054+1057 May-8-89
- 6 Laurensville 1058 May-16-89
- 7 Carlin Pond Me via Jackmantown Greenville  
1059 June-1-89
- 8+9 Kines Me. 1060-1061-1062-1063 only  
partial collections from 1060, 1061, and  
1062 June-18-89
- 10 - Jackmantown Me. Stage to Skowhegan then R.R.  
1060, 1061+1062 - June 27

Fossils of Schodarie Cr.

Hall Pal. N.Y., vol 4 <sup>pt I</sup> p 2

*Orthis Vanuxemi*

*Therapsid rhynchus Chemungensis*

*Strophomena demissa*

" *perplana*

" *crinistralis*

*Spirifer* *fimbriatus*

*Atrypa impressa*

many *Cyrtoceras*

*Gyrogonas*

*Dalmanella*

*Phacops*

*Lichas*

*Acidaspis*

Hall Pal. N.Y., vol 4 p 77 page 7

*Canda Galli* Cr. almost non fossilifer

*Tricardius Canda Galli*

A *Platyceras* like *P. tortuosum* has been found in it.

Passage from Orisk. to this Cr. is very abrupt & strongly defined, dark or nearly black weathering to gray or brown gray with strong joint lines nearly lat. at 20 to 45 bedding & these being often close & well defined while the lines of bedding are obscure, give it the appearance of nearly vertical stratification. In upper part a gradual increase of calcareous matter & fossils imperceptibly to the Schodarie Cr., which contains many fossils.

Devonian Classification of

113

Chemung { Chemung < Ithaca  
              { Portage

Hamilton { Genesee < Tully  
              { Hamilton  
              { Marcellus

Coniof. { Coniof. { Onondaga  
          { Schuchania  
          { Canada Balli

Oriskany

Up. Sil. / Low Helderberg

height of eye =  $5\frac{1}{3}ft$

